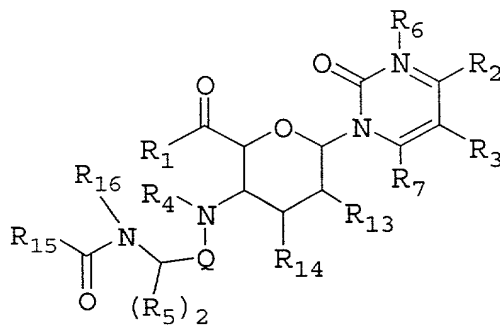


## CLAIMS

What is claimed is:

1. A compound of the formula (I):



I

where  $R_1$  is  $\sim NR_8R_9$  or  $\sim C(R_{10})_3$ ;

$R_2$ ,  $R_3$  and  $R_7$  each independently are  $\sim NR_{11}R_{12}$ ,  $\sim YZ$ , alkyleno, substituted alkyleno, heteroalkyleno, substituted heteroalkyleno, aryleno, heteroarylno, alkylenearylno, arylenealkylno, alkyleneheteroalkylno, heteroarylno, halyleno, H radical or;

where  $R_2$  and  $R_3$  or  $R_3$  and  $R_7$ , together form a ring including two atoms of the pyrimidine ring and having at least 1 additional ring atom;

each  $R_5$  independently is alkyl, substituted alkyl, heteroalkyl, alkylheteroaryl, aryl, heteroaryl,  $\sim (CH_2)_nN(R_{11}R_{12})$ ,  $\sim (CH_2)_nG$  or H radical;

$R_6$  is an electron pair, alkyleno, heteroalkyleno, aryleno, heteroarylno or H radical;

$R_4$ ,  $R_{11}$ ,  $R_{12}$ ,  $R_{15}$  and  $R_{16}$  each independently are alkyleno, heteroalkyleno, aryleno, heteroarylno or H radical;

$R_8$  and  $R_9$  each independently are alkyleno, heteroalkyleno, substituted heteroalkyleno, aryleno, heteroarylno, H radical or together join to form an aminocyclic ring radical;

each  $R_{10}$  independently is alkyleno, heteroalkyleno, aryleno, heteroarylno, halyleno or H radical;

$R_{13}$  and  $R_{14}$  each independently are alkyleno, heteroalkyleno, aryleno, heteroarylno, halyleno, hydroxyleno or H radical;

Y is a heteroatom radical with Z a radical selected from the group comprising 1 or more heteroatoms or H, alkyleno, heteroalkyleno, aryleno, heteroaryleno, halyleno, combinations thereof and adapted to fill the valence of Y, said Y being singly or doubly bound to the pyrimidine ring radical;

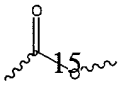
- 5 Q is a member selected from the group of radicals comprising  $\sim\text{S}(=\text{O})\sim$ ,  $\sim\text{S}(\text{O})_2\sim$ ,  $\sim\text{C}(=\text{O})\sim$ ,  $\sim\text{C}(=\text{S})\sim$ ,  $\sim\text{CH}_2\sim$ ,  $\sim\text{Y}(\text{O})\sim$  and  $\sim\text{C}(\text{Y})_n\sim$ ; where G is a cyclic alkyleno or cyclic heteroalkyleno substituent and n is an integer of at least 0; and with the proviso that;

when  $\text{R}_2$  is  $\sim\text{NH}_2$  and  $\text{R}_9$  is  $\sim\text{H}$ , then;

$\text{R}_8$  is not an amino acid and;

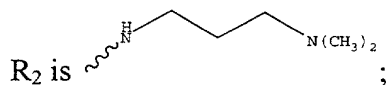
the ratio of carbon atoms to nitrogen atoms of  $\text{R}_5$  is greater than or equal to one and;

$\text{R}_{16}$  is H radical and;

$\text{R}_{15}$  does not comprise a  radical.

2. The compound according to claim 1 wherein  $\text{R}_1$  is  $\text{N}(\text{alkyl})_2$ ;  
 $\text{R}_2$  is  $\sim\text{NHalkyl}$ ;  
 $\text{R}_3$ ,  $\text{R}_4$  and  $\text{R}_7$  are  $\sim\text{H}$ ;  
 $\text{R}_5$  is an  $\sim\text{alkyl}(\text{heteroyl})$ ;  
 $\text{R}_{13}$  and  $\text{R}_{14}$  are OH.

3. The compound according to claim 1 wherein;  
 $\text{R}_1$  is piperazine radical;



$\text{R}_5$  is  $\sim(\text{CH}_2)_2\text{OH}$ .

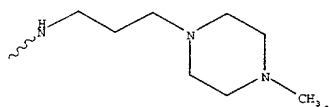
4. The compound according to claim 3 wherein Q is  $\text{C}(=\text{O})$  radical.  
 5. The compound according to claim 3 wherein Q is  $\text{C}(=\text{S})$  radical.

6. The compound according to claim 3 wherein Q is S(=O) radical.

7. The compound according to claim 1 wherein;

R<sub>1</sub> is piperazine radical;

R<sub>2</sub> is



8. The compound according to claim 7 wherein Q is C(=O) radical.

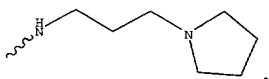
9. The compound according to claim 7 wherein Q is C(=S) radical.

10. The compound according to claim 7 wherein Q is S(=O) radical.

11. The compound according to claim 1 wherein;

R<sub>1</sub> is piperazine radical;

R<sub>2</sub> is



12. The compound according to claim 11 wherein Q is C(=O) radical.

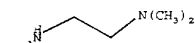
13. The compound according to claim 11 wherein Q is C(=S) radical.

14. The compound according to claim 11 wherein Q is S(=O) radical.

15. The compound according to claim 1 wherein;

R<sub>1</sub> is piperazine radical;

R<sub>2</sub> is



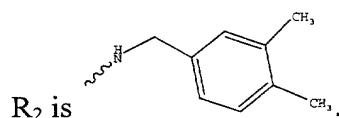
16. The compound according to claim 15 wherein Q is C(=O) radical.

17. The compound according to claim 15 wherein Q is C(=S) radical.

18. The compound according to claim 15 wherein Q is S(=O) radical.

19. The compound according to claim 1 wherein;

R<sub>1</sub> is piperazine radical;



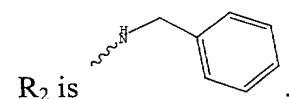
20. The compound according to claim 19 wherein Q is C(=O) radical.

21. The compound according to claim 19 wherein Q is C(=S) radical.

22. The compound according to claim 19 wherein Q is S(=O) radical.

23. The compound according to claim 1 wherein;

R<sub>1</sub> is piperazine radical;



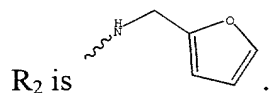
24. The compound according to claim 23 wherein Q is C(=O) radical.

25. The compound according to claim 23 wherein Q is C(=S) radical.

26. The compound according to claim 23 wherein Q is S(=O) radical.

27. The compound according to claim 1 wherein;

$R_1$  is piperazine radical;



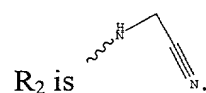
5 28. The compound according to claim 27 wherein Q is C(=O) radical.

29. The compound according to claim 27 wherein Q is C(=S) radical.

30. The compound according to claim 27 wherein Q is S(=O) radical.

31. The compound according to claim 1 wherein;

$R_1$  is piperazine radical;

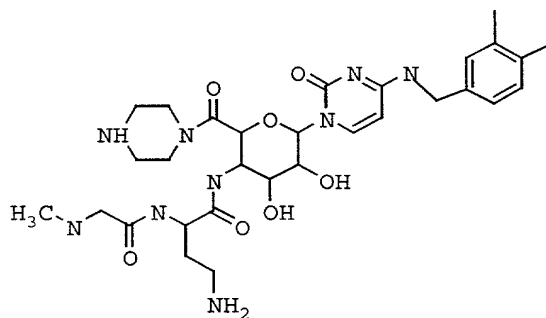


10 32. The compound according to claim 31 wherein Q is C(=O) radical.

33. The compound according to claim 31 wherein Q is C(=S) radical.

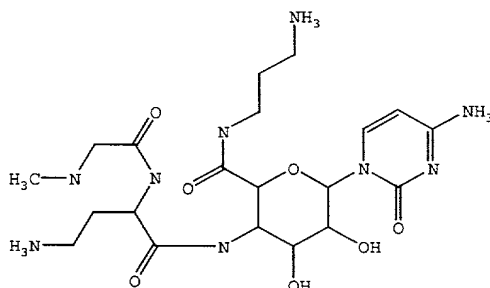
34. The compound according to claim 31 wherein Q is S(=O) radical.

20 35. The compound of claim 1 having structure Ia.



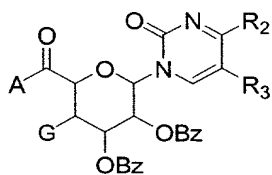
Ia

36. The compound of claim 1 according to the graphical representation of structure Ib.




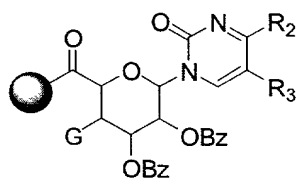
Ib

37. The compound of claim 1 wherein at least one stereoisomer is predominate.
38. A pharmaceutical composition comprising: a compound according to claim 1 and pharmaceutically acceptable salts thereof, associated with a pharmaceutically acceptable carrier, diluent, prodrug or lubricant.
39. A method of making compounds according to claim 1 comprising:
- associating a compound according to structure III where A is a linker and G is a reaction-group, with a solid support for generating an intermediate compound associated with the solid support through said linker according to structure IIIa



III

where  is the solid support;

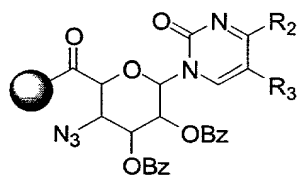


IIIa

b) generating the intermediate compound IIIa associated with the solid support;

5 c) chemically manipulating said intermediate compound thereby generating the compound according to claim 1.

40. The method according to claim 39 wherein the intermediate is according to structure IV.



IV

41. The method according to claim 39 wherein the solid support is a resin.

42. A method of using a composition or a pharmaceutically acceptable salt thereof comprising:

- i) obtaining a composition according to claim 39;
- ii) administering said pharmaceutical composition in a pharmaceutically acceptable manner to provide a desired result.

43. The method of claim 42 wherein the pharmaceutical composition further comprises a pharmaceutically acceptable prodrug, a pharmaceutically acceptable diluent, a pharmaceutically acceptable lubricant or a pharmaceutically acceptable carrier.

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